

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed November 17, 2008. Claims 1, 6-7, 9-15, and 21 have been amended in the present response. Claims 1-2, 4-7, 9-17, and 19-24 remain pending in the present application. Reconsideration and allowance of the application and the presently pending claims are respectfully requested.

1. Response to Rejection of Claims under 35 U.S.C. § 101

Claims 6-7 and 9-14 have been rejected under 35 U.S.C. § 101 as allegedly being directed to nonstatutory subject matter. Independent claim 6 has been amended to address the Examiner's concerns. For example, amended claim 6 recites that a processor senses a change of connection status, establishes a communication session, and forwards graphics device commands to a print service. Therefore, claims 6-7 and 9-14 are tied to a particular machine. For at least these reasons, withdrawal of the rejection is requested.

2. Response to Rejection of Claims under 35 U.S.C. § 103

Claims 1-2, 4-7, 9-17, and 19-24 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Lamming* (U.S. Patent No. 6,922,725) in view of *Lin* (U.S. Patent No. 6,757,070) in view of *Abe* (U.S. Patent No. 6,892,299) in view of *Vidyanand* (U.S. Patent No. 6,967,728).

a. Claim 1

As provided in independent claim 1, Applicants claim:

A method for printing information at a remote location, comprising:
establishing a network connection at a remote location;
receiving a list of printing devices communicatively coupled to a
print service available to a mobile-computing device;
***accepting and installing at the mobile-computing device a
latest version of a common print driver from the print service;***
requesting a print device context responsive to a printer selected
from the list of printing devices;

using an application resident on the mobile-computing device to render information to the print device context, wherein the application generates a plurality of device commands responsive to the information to be printed;

forwarding the device commands to the print service, wherein the print service renders the device commands against the printer; and

upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected.

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Lamming* in view of *Lin* in view of *Abe* in view of *Vidyanand* does not disclose, teach, or suggest at least "accepting and installing at the mobile-computing device a latest version of a common print driver from the print service" and "upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as emphasized above.

For example, *Lamming* describes processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printer. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* discloses a document server (as opposed to a mobile-computing device) utilizing a driver. As such, *Lamming* fails to teach or suggest at least "accepting and installing at the mobile-computing device a latest version of a common print driver from the print service" or "upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 1.

Further, *Lin* describes a print driver being pre-installed in a client computer and does not disclose a driver being accepted and installed from a print service by a mobile-

computing device. See col. 4, lines 60-66. As such, *Lin* individually or in combination with *Lamming* fails to teach or suggest "accepting and installing at the mobile-computing device a latest version of a common print driver from the print service" or "upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 1.

Abe describes a printer driver specific to a printer being downloaded to a portable terminal. As such, *Abe* individually or in combination with *Lamming* and *Lin* fails to teach or suggest "accepting and installing at the mobile-computing device a latest version of a common print driver from the print service" or "upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 1.

In addition, *Vidyanand* describes print preferences (e.g., a preference for a certain page size) being transferred and does not disclose that a driver is transferred or received from a print service in the manner claimed. See, e.g., col. 5, lines 36-64. As such, *Vidyanand* individually or in combination with *Lamming*, *Lin*, and *Abe* fails to teach or suggest "accepting and installing at the mobile-computing device a latest version of a common print driver from the print service" or "upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 1.

As a result, claim 1 is patentable over the cited art, and the rejection should be withdrawn.

b. Claims 2 and 4-5

Claim 1 is allowable over the cited art of record for at least the reasons given above. Since claims 2 and 4-5 depend from claim 1 and recite additional features, claims 2 and 4-5 are allowable as a matter of law over the cited art of record.

c. Claim 6

As provided in independent claim 6, Applicants claim:

A computer-readable storage medium having stored thereon an executable instruction set, the instruction set, when executed by a processor, directs the processor to perform a method comprising:

sensing by the processor a change of connection status between a mobile-computing device and a wireless access device coupled to a local area network;

establishing by the processor a communication session with a print service accessible via the local area network when the change of connection status indicates that the mobile-computing device has established a communication session with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a designated printer coupled to the print service;

using the printer driver to intercept graphics device commands generated by an application operative on the mobile-computing device;

forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and

upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected.

(Emphasis added).

Applicants respectfully submit that independent claim 6 is allowable for at least the reason that *Lamming* in view of *Lin* in view of *Abe* in view of *Vidyanand* does not disclose, teach, or suggest at least “forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and upon termination of the network connection at the remote location, restoring a default-printing

device resource pool as the list of printing devices that are available to be selected," as emphasized above.

For example, *Lamming* describes processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest "forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 6.

Further, *Lin* describes a print driver being pre-installed in a client computer and does not disclose a driver being accepted and installed from a print service by a mobile-computing device. See col. 4, lines 60-66. As such, *Lin* individually or in combination with *Lamming* fails to teach or suggest "forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 6.

Abe describes a printer driver specific to a printer being downloaded to a portable terminal. As such, *Abe* individually or in combination with *Lamming* and *Lin* fails to teach or suggest "forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands

against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 6.

In addition, *Vidyanand* describes print preferences (e.g., a preference for a certain page size) being transferred and does not disclose that a driver is transferred or received from a print service in the manner claimed. See, e.g., col. 5, lines 36-64. As such, *Vidyanand* individually or in combination with *Lamming*, *Lin*, and *Abe* fails to teach or suggest "forwarding the graphics device commands by the processor to the print service, wherein the print service renders the graphics device commands against the designated printer, wherein during the communication session, the mobile-computing device receives a common driver from the print service; and upon termination of the network connection at the remote location, restoring a default-printing device resource pool as the list of printing devices that are available to be selected," as recited in claim 6," as recited in claim 6.

As a result, claim 6 is patentable over the cited art, and the rejection should be withdrawn.

d. Claims 7 and 9-14

Claim 6 is allowable over the cited art of record for at least the reasons given above. Since claims 7 and 9-14 depend from claim 6 and recite additional features, claims 7 and 9-14 are allowable as a matter of law over the cited art of record.

e. Claim 15

As provided in independent claim 15, Applicants claim:

A mobile-computing device, comprising:

means for responding to a change of connection status between a mobile-computing device and a wireless access device communicatively coupled to a print service;

means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver;

means for intercepting graphics device commands generated by an application operative of the mobile-communication device;

means for forwarding the graphics device commands to the print service, wherein the print service renders the graphics device commands in accordance with the printer; and

means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location.

(Emphasis added).

Applicants respectfully submit that independent claim 15 is allowable for at least the reason that *Lamming* in view of *Lin* in view of *Abe* in view of *Vidyanand* does not disclose, teach, or suggest at least “means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver from the print service” and “means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location,” as emphasized above.

For example, *Lamming* describes processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver from the print service and "means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location," as recited in claim 15.

Further, *Lin* describes a print driver being pre-installed in a client computer and does not disclose a driver being accepted and installed from a print service by a mobile-computing device. See col. 4, lines 60-66. As such, *Lin* individually or in combination with *Lamming* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver from the print service and "means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location," as recited in claim 15.

Abe describes a printer driver specific to a printer being downloaded to a portable terminal. As such, *Abe* individually or in combination with *Lamming* and *Lin* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver from the print service and "means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location," as recited in claim 15.

In addition, *Vidyanand* describes print preferences (e.g., a preference for a certain page size) being transferred and does not disclose that a driver is transferred or received from a print service in the manner claimed. See, e.g., col. 5, lines 36-64. As such, *Vidyanand* individually or in combination with *Lamming*, *Lin*, and *Abe* fails to teach or suggest "means for establishing a communication session with the print service when the change of connection status indicates that the mobile-computing device has established a connection with the wireless access device, wherein during the communication session the mobile-computing device uses a printer driver configured to generate a generic device context responsive to a printer coupled to the print service and wherein the means for establishing a communication session further comprises means for receiving a common driver from the print service and "means for restoring a default-printing device resource pool as the list of printing devices that are available to be selected upon termination of the network connection at the remote location," as recited in claim 15.

As a result, claim 15 is patentable over the cited art, and the rejection should be withdrawn.

f. Claims 16-17 and 19-20

Claim 15 is allowable over the cited art of record for at least the reasons given above. Since claims 16-17 and 19-20 depend from claim 15 and recite additional features, claims 16-17 and 19-20 are allowable as a matter of law over the cited art of record.

g. Claim 21

As provided in independent claim 21, Applicants claim:

A mobile-computing apparatus, comprising:

a processor;

a memory coupled to the processor having stored therein a driver comprising:

a communication interface including:

an application interface for communicatively coupling the driver to an application executing within the processor; and

a print service interface for communicatively coupling the driver to a print service wirelessly coupled to the mobile-computing apparatus, wherein the mobile-computing apparatus receives the driver from the print service;

an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and

a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service, ***wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service.***

(Emphasis added).

Applicants respectfully submit that independent claim 21 is allowable for at least the reason that *Lamming* in view of *Lin* does not disclose, teach, or suggest at least "a print service interface for communicatively coupling the driver to a print service wirelessly coupled to the mobile-computing apparatus, wherein the mobile-computing apparatus receives the driver from the print service" and "wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing

devices that are available to be selected upon termination of a network connection with the print service," as emphasized above.

For example, *Lamming* describes processing a document service request from a mobile computing device. In *Lamming*, the mobile computing device 212 communicates with a document server 108 and identifies a document to be printed. The "document server 108 locates the document identified by the document reference specified as a parameter in the document service request. . . . [A]fter retrieving the document identified by the document reference, a driver is loaded if necessary (i.e., not already loaded) for the specified output device that is adapted to process the format in which the retrieved document exists." See col. 10, lines 46-60. As such, *Lamming* fails to teach or suggest at least "an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service" and "wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service," as recited in claim 21.

Further, *Lin* describes a print driver being pre-installed in a client computer and does not disclose a driver being accepted and installed from a print service by a mobile-computing device. See col. 4, lines 60-66. As such, *Lin* individually or in combination with *Lamming* fails to teach or suggest at least "an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service" and "wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service," as recited in claim 21.

Abe describes a printer driver specific to a printer being downloaded to a portable terminal. As such, *Abe* individually or in combination with *Lamming* and *Lin* fails to teach or suggest "an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service" and "wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service," as recited in claim 21.

In addition, *Vidyanand* describes print preferences (e.g., a preference for a certain page size) being transferred and does not disclose that a driver is transferred or received from a print service in the manner claimed. See, e.g., col. 5, lines 36-64. As such, *Vidyanand* individually or in combination with *Lamming*, *Lin*, and *Abe* fails to teach or suggest "an interceptor coupled to the communication interface, the interceptor configured to identify and forward graphics device commands issued by the application; and a formatter coupled to the interceptor, wherein when the formatter is enabled, the formatter renders information desired to be printed from the mobile-communication device to an intermediate format communicated to the print service" and "wherein the application interface is enabled to restore a default-printing device resource pool as a list of printing devices that are available to be selected upon termination of a network connection with the print service," as recited in claim 21.

As a result, claim 21 is patentable over the cited art, and the rejection should be withdrawn.


h. Claims 22-24

Claim 21 is allowable over the cited art of record for at least the reasons given above. Since claims 22-24 depend from claim 21 and recite additional features, claims 22-24 are allowable as a matter of law over the cited art of record.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,



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